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DEPARTMENT OF NATURAL RESOURCES

Division of Oil, Gas & Mining

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Inspection Report

Minerals Regulatory Program

Report Date September 20, 2006, 2006

Supervisor ABZ

Mine Name: Vernal Phosphate
Operator Name: Simplot Phosphates

Permit number: M0470007
Inspection Date: April 14, 2006
Time: 7:30 AM to 1:00 PM

Inspector(s): Paul Baker and Doug Jensen

Other Participants: John Spencer

Mine Status: Active

Weather: Clear, 40's to 60's

Elements of Inspection	Evaluated	Comment	Enforcement
1. Permits, Revisions, Transfer, Bonds	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Public Safety (shafts, adits, trash, signs, highwalls)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Protection of Drainages / Erosion Control	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
4. Deleterious Material	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Roads (maintenance, surfacing, dust control, safety)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Concurrent Reclamation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Backfilling/Grading (trenches, pits, roads, highwalls, shafts, drill holes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Water Impoundments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Soils	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Revegetation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
11. Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Purpose of Inspection:

The primary purpose was to look at some reclaimed areas to see if they qualify for final release

Inspection Summary:

1. Permits, Revisions, Transfer, Bonds

The operator has requested release for five areas that we examined during the inspection. There are also six areas we examined in 2004 that appear to meet release criteria but have not yet been released.

3. Protection of Drainages / Erosion Control

The report for the October 19, 2004, inspection mentions some erosion control problems, and these have been repaired.

10. Revegetation

We first examined the vegetation in three small areas on the northwest side of the mine. On a map received by the Division May 1, 2006, these areas are labeled Panel A North Area, Middle Area and South Area, and the acreages are 0.7, 1.9, and 0.2 acres. I measured perennial cover values of 21.4, 49.0, and 50.0 percent in these areas. Native species predominate, but there is some crested wheatgrass.

In Panel B Area 1 (reclaimed in 2002), I measured 37.5 percent perennial cover. In Panel B Area 2, I measured an average of 31.3 percent perennial cover. Near the pond, Panel B Area 3, the average cover value was 34.8 percent.

The vegetation on Panel B by the Hot Start varied from about 35 to 6 percent perennial cover. Some parts of this area were infested with cheatgrass, and although some areas would qualify for release, it is better to keep the entire area as a single unit.

Conclusions and Recommendations:

For final reclamation, the operator has been using a seed mix that includes 15 species with a total of 25.0 pounds per acre of pure live seed. I am recommending a modified seed mix with nearly the same species but reduced quantities.

Some areas, such as a portion of the area by the Hot Start, are infested with cheatgrass, and I do not expect perennial vegetation to become established in these areas without using an herbicide and reseeding. I recommend the following treatments in the fall, probably about early October:

1. Disc cheatgrass-infested areas.
2. Seed. I recommend drill seeding in this instance except that some species, such as sagebrush and forage kochia, need to be broadcast.
3. Apply the herbicide Plateau at a low rate, about 2-3 ounces per acre. Plateau needs to be mixed with methylated seed oil, and the application rate should be carefully controlled.

The three Panel A areas and Areas 1, 2, and 3 in Panel B meet the revegetation success standard. The mine has two revegetation standards depending on elevation, and these areas all meet the higher of the two standards (70 percent of 26 percent or 18.2 percent).

Inspector's Signature LEB RU Date: 9/28/06

PBB:pb

cc: John Spencer, Simplot
Pete Sokolosky, Vernal BLM